

Applicant Name Montana Department of Environmental Quality (DEQ)
Project Name Swift Gulch Placer Tailings and Wetland Establishment

Project Abstract

The Swift Gulch watershed originates near the Landusky Mine and flows northwest, joining South Bighorn Creek about 2,000 feet up-gradient of the Fort Belknap Indian Reservation boundary. Mineral extraction has occurred within this watershed since the late 1800s, and has included development of small adits, extensive placer mining throughout the length of the creek channel, and recent open pit mining along the drainage divide between Swift Gulch and King Creek to the south.

Pegasus Gold Corporation (PGC) conducted open pit mining at the Landusky Mine between 1979 and 1996. PGC declared bankruptcy in 1998, and the DEQ now operates water treatment systems at the site, using funds from short-term water treatment bonds that had been posted by PGC. Significant deterioration of water quality in Swift Gulch was first noted in 1999. Because impaired water quality in Swift Gulch became evident after the bankruptcy of PGC, no reclamation or water treatment bonds had been established to address conditions in that drainage.

DEQ and U.S. Bureau of Land Management (BLM) modified mine reclamation plans to improve water quality in Swift Gulch. Despite efforts to that end, no improvements have been observed.

The goal of this project is to improve water quality in Swift Gulch through rehabilitation of the reach of stream previously disrupted by placer dredge mining. As part of stream reconstruction, a series of ponds would be constructed to trap sediment that forms when iron-rich groundwater enters the stream near its headwaters, becomes oxidized, and forms a precipitate. Clean-out of the upper ponds as part of routine mine site maintenance would prevent this material from migrating farther downstream and influencing water quality on the Fort Belknap Indian Reservation. Ponds constructed lower in the drainage will be designed as wetlands which can further mitigate impaired water quality upstream from the reservation.

DEQ, in cooperation with the BLM, is responsible for implementing the reclamation program at the Landusky Mine. Subsequent to closure of the bankruptcy case, in June 2004, the BLM placed the mine sites under its Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority via an Action Memorandum. The action allows the BLM to continue to direct remedial activities at the sites despite the absence of an operator. The BLM is preparing an Engineering Evaluation/Cost Assessment (EE/CA) addressing long-term site management options. It is anticipated that the Draft EE/CA will be published in June 2006.

The Landusky Mine is 50 miles southwest of Malta, adjacent to the southern boundary of the Fort Belknap Indian Reservation. The Landusky Mine is in Sections 14, 15, 22, and 23, Township 25 North, Range 24 East, Phillips County. The Swift Gulch study area is in Sections 10, 11, 14, and 15 of Township 25 North, Range 24 East.

This project would take approximately 24 months.